ABSTRACT

Triple Tg (megsin/RAGE/iNOS-Tg) was created by crossing megsin-Tg with RAGE/iNOS-Tg. The megsin/RAGE/iNOS-Tg develops marked pathologies of diabetic nephropathy unfound in conventional models at early stages, and various pathological conditions such as glomerular hypertrophy were observed uniformly in the megsin/RAGE/iNOS-Tg mice. In addition, it was also found that animals exhibiting these symptoms were useful as a disease model animal for diabetic nephropathy. Specifically, the disease model animals of the present invention strongly express the megsin gene, a gene encoding the receptor for advanced glycation end-products, and an inducible nitric oxide synthase gene. As a result, accompanying kidney function disorders of glomerular failure develop at early stages.